

## **Tunable White Series 18 LED Indirect/Direct - 2E**

Declare. Third Party Verified		Date		
		Project		
S18 LED 2E with optional Extended Endcap		Туре		
		Comments		
	S18 LED 2E with standard Flat Endcap			
DESCRIPTION				
Series 18 LED-2E is a slim-profile rectilinear form scaled to co The luminaire uses mid-powered LEDs for long life and enha enrolled in the International Living Future Institute (ILFI) Declare 2 with options achieving Red List Approved and Declared status.	nced performance. This Product is 0 Program and is third-party verified	d	E - C1 - OBO - C	 P - RLA
Sill LED ID       ID         Finelite Series 18 LED (ID - Indirect/Direct)         Shielding (CS - Continuous <sup>1</sup> , SG - Segmented)         Length / Pre-qualified Controls by Others (4', 8', 12' multip         Light Engine System (2E - 2 Light Engine)         Light Output (B - Boosted Standard, V - Very High)         LED CRI (8 - 80 CRI Min (standard), 9 - 90 CRI Min)	les standard)	HH	HH	

LED Color reinperature ( <b>TW</b> - Tunable white. See below for Tunable white controls options)	
Uplight Optic ( <b>Open</b> - Standard, <b>FTO</b> - Frosted Top Optic, <b>CTO</b> - Clear Top Optic)	
Voltage (120V, 277V)	
Circuiting (SC - Single Circuit)	
Mounting (FA - Standard, AC - Optional, FM - Optional)	
Endcap (FE - Flat, EE - Extended)	
Ceiling type ( <b>C1</b> - 15/16" T-bar, <b>C2</b> - 9/16" T-bar, <b>C3</b> - Slot Grid, <b>C4</b> - Hard Ceiling)	
Integrated Sensors ( <b>OBO</b> - Occupancy, <b>OBD</b> - Daylight, <b>W601</b> - Wattstopper Wireless Sensor <sup>2</sup> , <b>OBE</b> - Enlighted <sup>3</sup> ,	
CLM - Encelium Sensor, RE7 - nLight Air Sensor, AOCC-W - Lutron Athena Sensor (Device Color White) <sup>4</sup> ,	
AOCC-B - Lutron Athena Sensor (Device Color Black) <sup>4</sup> , ARF-W - Lutron Athena RF (Device Color White) <sup>4</sup> ,	
ARF-B - Lutron Athena RF (Device Color Black) <sup>4</sup> )	
Special Options (CP - Chicago Plenum)	

(RLA - Red List Approved, RLD - Declared Label)

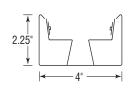
<sup>1</sup> Continuous shielding is standard with a maximum 8' length. Visible diffuse area is 7'9' centered on a 8' housing. Available with LED only. <sup>2</sup> LMFS-601 w/ 0-10V driver(s) and LMFI-111, up to 6 drivers may be connected / LMFS-601 w/ DALI driver, only 1 driver can be connected. <sup>3</sup> Enlighted components installed by Finelite, provided by others <sup>4</sup> Only available with DALI drivers - AOCC & AFF up to 4 drivers can be connected.

When selecting FineTune or pre-qualified DMX drivers made by others choose one of the following feed lengths below.

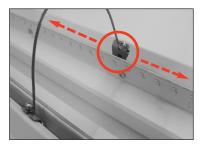
DMX Pendant Feed Length (5', 12', 30')\_

TUNABLE WHITE CONTROLS OPTIONS: SELECT ONE				
	FineTune controller with FineTune DMX Driver	OR	<ul> <li>Controls by others with pre-qualified DMX driver</li> <li>Controls by others with pre-qualified DALI driver</li> <li>Controls by others with pre-qualified PoE setup</li> <li>Controls by Lutron with pre-qualified Lutron driver</li> </ul>	
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### LUMINAIRE FEATURES



**DIMENSIONS AND LIGHT ENGINE** Two replaceable light engines with midpower LEDs provide excellent distribution for the uplight and downlight.



**OPTIONAL FLEXIBLE MOUNTING BRACKET** The Flexible Mounting Bracket (FM) adjusts along the length of the luminaire to accommodate existing mounting points.

3'	Standard	Continuous	Shielding	(CS)*
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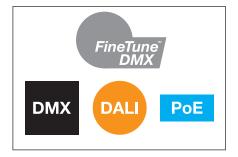
8' Optional Segmented Shielding (SG)

4' Shielding

#### SHIELDING

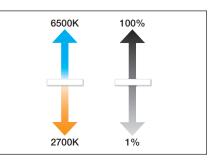
Continuous shielding is standard with a maximum 8' length. The visible diffuse area is 7'9" centered on a 8' housing. Optional segmented shielding available.

#### **TUNABLE WHITE FEATURES**



#### **MULTIPLE CONTROL ARCHITECTURES**

Finelite's FineTune™ DMX, qualified DMX, DALI (open and proprietary), or PoE (Power over Ethernet).



**TUNABLE WHITE** 

Any CCT between 2700K and 6500K with excellent CRI and R9 values; dimming from 100% to 1%.



#### FINETUNE SYSTEM

Award-winning control system, which includes intuitive wall mounted controller, power control center, driver, and mobile app to easily tailor lighting to match user preference.

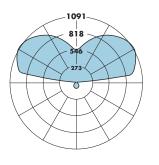
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# FINELITE

## **Tunable White Series 18 LED Indirect/Direct - 2E**

#### PHOTOMETRY – 4' Luminaire

S18 LED-ID-DCO-2E-V Very High (Open) Distribution: 94% up / 6% down Total luminaire output: 4416 lumens (1104 lumens/foot) Peak Candela Value: 1091 @ 125° CCT: 3500K Source Report: ITL 85168 (Family Correlation)



	CA	NDLEPO	WER S	UMMAF	RΥ	
	0	22.5	45.0	67.5	90.0	Flux
0	97	97	97	97	97	
5	96	96	96	96	96	9
15	93	93	94	94	94	26
25	86	86	87	88	88	40
35	76	76	78	78	78	48
45	64	64	65	66	65	50
55	50	50	51	51	50	45
65	34	34	35	34	34	34
75	18	19	19	18	18	20
85	4	5	5	4	4	5
90	0 0	õ	Ő	Ó	O	Ŭ
95	46	331	637	679	576	404
105	139	461	743	926	992	710
115	235	515	836	1007	1059	743
125	323	544	850	1038	1091	702
135	398	557	815	981	1041	595
145	459	555	759	892	935	456
145						
	502	547	676	773	809	308
165	530	539	592	637	656	169
175	543	543	544	548	549	23
180	544	544	544	544	544	

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire		
В*	V**	
2273	4416	

Light Output, 3500K, 80 CRI (Lumens Per Foot)		
В*	V**	
568	1104	

Power, 3500K, 80 CRI (Watts Per Foot)		
B*	V**	
5.1	10.2	

Efficacy, 3500K, 80 CRI (Lumens Per Watt)		
В*	V**	
112	108	

#### B - Boosted Standard Output, V - Very High Output

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V. \*\* Based on ITL report: 85168

Lumen Adjustment Factors - 80 CRI			
2700K	0.968		
3000K	0.985		
3500K	1.000		
4000K	1.032		
6500K	1.032		

Lumen Adjustment Factors - 90 CRI			
2700K	0.731		
3000K	0.746		
3500K	0.760		
4000K	0.789		
6500K	0.789		

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI

#### SAMPLE LUMEN ADJUSTMENT CALCULATION

Boosted Standard Output (B), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

Total Light Output = 2273 lm x 0.789 = 1793 lm

Total Light Output per Foot = 568 lm/ft x 0.789 = 448 lm/ft

watts/foot = 5.1 W/ft

$$Efficacy = \frac{448 \frac{lm}{ft}}{5.1 \frac{W}{ft}} = 88 \text{ Im/W}$$

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# FINELITE

### FROSTED TOP OPTIC (FTO) - 4' Luminaire

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire		
B*	V**	
1972	3831	

Light Output, 3500K, 80 CRI (Lumens Per Foot)		
B*	V**	
493	958	

Power, 3500K, 80 CRI (Watts Per Foot)		
B*	V**	
5.1	10.7	

Efficacy, 3500K, 80 CRI (Lumens Per Watt)		
B*	V**	
97	94	

#### B - Boosted Standard Output, V - Very High Output

\* Family Correlation based on 4' luminaire 3500K Very High Output (V) test - 120V. \*\* Based on ITL report: 85168

Lumen Adjustment Factors - 80 CRI			
2700K	0.968		
3000K	0.985		
3500K	1.000		
4000K	1.032		
6500K	1.032		

Lumen Adjustment Factors - 90 CRI			
2700K	0.731		
3000K	0.746		
3500K	0.760		
4000K	0.789		
6500K	0.789		

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI

#### SAMPLE LUMEN ADJUSTMENT CALCULATION

Boosted Standard Output (B), 4000K, 90 CRI

*Lumen Adjustment Factor* = 0.789

*Total Light Output* = 1972 lm x 0.789 = 1555 lm

Total Light Output per Foot = 493 lm/ft x 0.789 = 388 lm/ft

watts/foot = 5.1 W/ft

$$Efficacy = \frac{388 \frac{lm}{ft}}{5.1 \frac{W}{ft}} = 76 \text{ Im/W}$$

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### – SPECIFICATIONS ——

**CONSTRUCTION:** Body is 20-gauge die-formed steel with an 18-gauge die-formed internal joiner system. Plug-together wiring standard. All components are hard-tooled to tolerances of +/- 0.010".

**ENDCAPS**: The Flat Endcap (**FE**) is standard and made of 20-gauge die-formed steel adding 0.10" at each end. The optional Extended Endcap (**EE**) is an aluminum die-cast endcap and adds 0.55" at each end.

**REFLECTORS**: Die-formed 24-gauge cold-rolled steel reflectors finished in 96LG High Reflectance white powder coat paint.

**UPLIGHT OPTICS:** The 2E optical system is open, standard. Optional Frosted Top Optic (**FT0**) and Clear Top Optic (**CT0**), available.

#### SHIELDING:

Diffusers are 73% transmissive with 99% diffusion. Luminaires are available with two distinct shielding options:

- CS Continuous Shielding (**CS**) is standard with a maximum 8' length. The visible diffuse area is 7'9" centered on an 8' housing.
- SG Segmented Shielding (SG) option available.

**LIGHT OUTPUT:** Two lumen packages available, Boosted Standard ( $\mathbf{B}$ ) and Very High ( $\mathbf{V}$ ). A separate chart summarizes lumen distribution and wattage. Light engines are replaceable.

**LUMEN MAINTENANCE:** 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

**TUNABLE WHITE DRIVER:** High Performance DMX LED driver. Driver is fully accessible from below ceiling. 120/277V. Power factor  $\geq 0.90$ . Total Harmonic Distortion (THD): <20%. Dimming Range: 100 - 1%. Expected driver lifetime: 100,000 hours.

**LUTRON DRIVER OPTIONS: LUTDTW** (1% T-Series 2-Channel Digital Tunable White (PSQ Series)).

#### ELECTRICAL:

Emergency Option DMX: Battery backup only.

Emergency Option DALI: Battery backup, optional emergency-to-generator/inverter wiring

Emergency Option LUTRON: Battery backup, optional emergency-to-generator/inverter wiring.

Emergency Option PoE: Contact Factory.

Battery Backup: Factory-choice low-profile backup battery also available; 8' minimum fixture length. Backup batteries deliver 2208 lumens. A 4' section will be illuminated in emergency mode. Backup battery will operate at 6500K in emergency.

DMX MOUNTING: For grid ceiling applications the dual GridBox<sup>™</sup> mounting is supplied (standard). For hard ceiling applications the ceiling mounting box is supplied (standard). For details, see Mounting Features on page 2. DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths. Available DMX pendant feed lengths are 5', 12', and 30' (5' standard.)

Daylight Deviation occupancy sensors and Integrated PIR (Passive Sensor Sensor Infrared) occupancy sensors available. Refer to Occupancy Sensor and Daylight Sensor tech sheets for more info.

**DMX INTERCONNECTION CABLES:** Luminaires are prewired with plug-and-play interconnection cables to support easy plug-together joining of fixture runs. If a non-FineTune DMX system has been specified, a DMX to RJ45 converter is provided.

**MOUNTING:** 50" Fully Adjustable (**FA**) plated steel aircraft cable with safety stop hardware standard. Contact factory for additional lengths up to 150". Optional semi-adjustable Aircraft Cable (**AC**) ( $\pm$  0.5") in lengths of 12", 15", 18", 21", 24", 27", 30", 36". DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths. Available DMX pendant feed lengths are 5', 12', and 30' (5' standard.)

FLEXIBLE MOUNTING BRACKET: The optional Flexible Mounting Bracket (FM) with curved balancer, can be adjusted along the length of the luminaire to accommodate existing mounting points.

**FINISHES:** Finelite Signal White (**SW**) powder coat, Finelite Black (**RAL 9005**) with semi gloss fine texture (**FB**),and Satin Aluminum (**SA**) are standard. Optional Adders: 179 RAL colors.<sup>1</sup>

**FEED:** Standard with one 18-gauge single-circuit feed. 14-gauge feed used when fixture current exceeds 5 amps. DMX and power feed at same location (standard). DMX feeds cannot be cut or spliced. DMX feeds should be ordered based on fixed lengths.

LENGTHS / PRE-QUALIFIED CONTROLS BY OTHERS: 4', 8', and 12' sections can be combined to make longers runs.

LABELS: Fixture and electrical components are ETLlisted conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.130 (G), this luminaire contains an internal driver disconnect. UL 924 and UL 2108 -PoE options available on request. Damp Location. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2015/663. Finelite makes the specification process easy when putting healthier products on your projects. Simply add – **RLA** (Red List Approved) or – **RLD** (Red List Declared Label) to your part number.

#### WEIGHT: 2.5 lb/ft.

**WARRANTY:** 10-year performance-based warranty on all standard components. Qualified drivers by others and optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

#### TUNABLE WHITE PRE-QUALIFIED DRIVERS BY OTHERS

DMX	DALI	POE set up	LUTRON
EldoLED	EldoLED, Crestron	Contact Factory	LUTRON

<sup>1</sup>20 Business day lead time for color

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